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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/576,727	05/23/2000	Chad A. Cobbley	3639.1US (97-1383.1)	3108

7590

10/14/2005

James R. Duzan

Trask Britt

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RECEIVED

OCT 17 2005

TRASKBRITT, P.C.

EXAMINER

TRINH, MINH N

ART UNIT

PAPER NUMBER

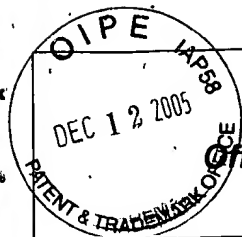
3729

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SCANNED

JAN 10 2006



Office Action Summary

Application No.

09/576,727

Applicant(s)

COBBLEY ET AL.

Examiner

Minh Trinh

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,8,18-20,22,23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,8,18-20,22,23 and 25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/12/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Applicant amendment filed on 8/19/05 has been fully considered and made of record.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-3, 5, 6, 8, 18-20 and 22, 23 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation recites: " surface of said substrates said through holes having a diameter in the range of about two diameters of a conductive sphere to about ten diameters of a conductive sphere" (see amended claims 1 and 18) is incorrect because the drawings and specification do not seem to describe the above claimed subject matters. At best the specification (page 9, lines 19-26) and related Fig. 4 discloses a bottom opening of the hopper 50/50A having the above configurations. Therefore, the newly amended subject matter such as "surface of said substrates said through holes having a diameter in the range of about two diameters of a conductive sphere to about ten diameters of a conductive sphere "is vague and indefinite.

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4. Claims 1-3, 6, 8, 18-20, 23 and 25, as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakemi et al in view of Yeh et al. This rejection is set forth in prior Office Action, paragraph 5.

5. Claims 5 and 22 as best understood are rejected under 35 U.S.C. 103(a) as obvious over Sakemi et al in view of Yeh et al. This rejection is set forth in prior Office Action, paragraph 6.

Response to Arguments

6. Applicant's arguments filed on 8/19/05 have been fully considered but they are not persuasive.

a) First, the amendment to the claims raises issues of 112 (see above).

b) Secondly, regarding to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either

in the references themselves (i.e., see Fig. 4, and the discussion at col. 4 of Sakemi et al).

c) Third, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., see amended subject matter of claims 1 and 18). Noting that the subject matter recited in these claims is not described in the specification and/or drawings (see 112 rejections above). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

d) Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Interviews After Final

7. Applicants note that an interview after a final rejection will not be granted unless the intended purpose and content of the interview is presented briefly, in writing (the agenda of the interview must be in writing). Such an interview may be granted if the examiner is convinced that disposal or clarification for appeal may be accomplished with only nominal further consideration. Interviews merely to restate arguments of record or to discuss new limitations which would require more than nominal reconsideration or new search will be denied. See MPEP 714.13 and 713.09.

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It is noted that any amendment made to the disclosure and the claims. Applicant requires to point out the support provide numeral references to the claimed limitations as well as support in the disclosure (i.e., page and line numbers and reference number associated with from the drawings) for better clarity (See 37CFR 1.111 and section 2163.06 of the MPEP).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (571) 272-4569. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

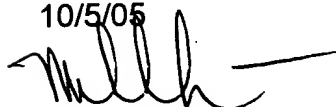
Art Unit: 3729

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

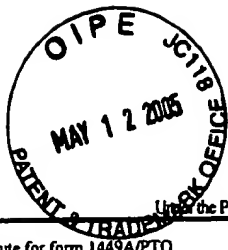
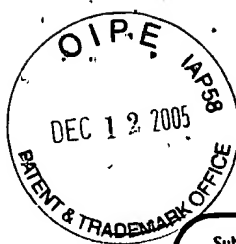
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mt

10/5/05



Minh Trinh
Primary Examiner



PTO/SB/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

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Complete if Known

Application Number	09/576,727
Filing Date	May 23, 2000
First Named Inventor	Cobbley et al.
Group Art Unit	3729
Examiner Name	M. Trinh
Attorney Docket Number	2269-3639.1US (97-1383.01/US)

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ³ (if known)			
mt		US-6,158,649	12/12/2000	Miura	
		US- 6,182,358	02/08/2001	Bolde	
		US- 6,227,437 B1	05/08/2001	Razon et al.	
		US- 6,276,598 B1	08/21/2001	Cheng et al.	
		US- 6,279,816 B1	08/28/2001	Nakajima et al.	
		US- 6,388,433 B1	05/14/2002	Razon et al.	
		US- 6,533,160 B1	03/18/2003	Bourrieres et al.	
		US- 6,533,163 B2	03/18/2003	Saso	
		US- 6,541,364 B2	04/01/2003	Mukuno et al.	
		US- 2003/0127501 A1	07/10/2003	Cheng et al.	
		US- 6,804,673 B1	08/12/2003	Bourrieres et al.	
		US- 6,834,545 B2	10/21/2003	Razon et al.	
		US- 6,745,450 B1	08/08/2004	Bolde	
		US- 6,766,938 B2	07/27/2004	Cheng et al.	
		US- 6,869,008 B2	03/22/2005	Inoue et al.	
✓		US- 2005/0045701 A1	03/03/2005	Shindo et al.	
		US-			
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		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	10/6/05
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* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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